REMARKS

The Examiner is thanked for the performance of a thorough search. By this amendment Claims 1 and 7 have been amended, Claims 27-31 have been added, and Claims 14-26 (which were the subject of a prior restriction requirement) have been cancelled. Hence, Claims 1-13 and 27-31 are pending in the Application.

SUMMARY OF REJECTIONS/OBJECTIONS

Claims 1-12 are rejected under 35 U.S.C. § 101 for allegedly being directed to non-statutory subject matter.

Claims 1-13 are rejected under 35 U.S.C. § 103(a) for allegedly being unpatentable over Huras et at U.S. Patent 6,807,540 B2 (*"Huras"*) in view of Agesen et al U.S. Patent 6,314,563 B2 (*"Agesen"*).

The rejections are respectfully traversed.

THE PENDING CLAIMS CONFORM TO 35 U.S.C. § 101

Claims 1-12 were rejected under 35 U.S.C. § 101 for allegedly being directed to non-statutory subject matter. The Office Action alleges that Claims 1-12 represent an abstract idea without a claimed limitation to a practical application

Without acquiescence to the position of the Office Action, each of Claims 1 and 7 have been amended to clarify that the claim is directed toward a computer-implemented approach for detecting termination of an application instance. Thus, at least one element of each of Claims 1 and 7 are performed by a computer. Detecting termination of an application instance is tied to a technology art and has a practical application that produces a concrete, useful and tangible result. Each of Claims 2-6 and 8-12 depend on one of Claims 1 and 7. As a result, each of Claims 1-12 is directed towards statutory

subject matter in conformance with 35 U.S.C. § 101. Therefore, it is respectfully submitted that the rejection of Claims 1-12 made under 35 U.S.C. § 101 has been overcome.

THE PENDING CLAIMS ARE PATENTABLE OVER THE CITED ART

Even if the cited art were to be properly combined, each of the pending claims recites a combination of features that is not disclosed, taught, or suggested by the cited art, either individually or in combination. Each pending claim shall be discuss individually below.

Claim 1

Claim 1 recites the following features:

> a holding process configured to obtain a first exclusive lock on an object maintained by the application instance;
> a waiting process configured to (a) request a second exclusive lock on the object after the holding process has been granted the first exclusive lock on the object, and (b) return a result signal, to a monitor process, upon at least one of acquiring the second exclusive lock and ceasing to be blocked; and
> **the monitor process configured to process the result signal to determine whether the application instance has terminated.** (emphasis added)

At least the above-bolded element is not disclosed, taught, or suggested by *Huras* and *Agesen*, either individually or in combination.

Claim 1 is directed towards a system for detecting termination of an application instance using locks. The system of Claim 1 includes a holding process configured to obtain a first exclusive lock on an object maintained by an application instance. The system of Claim 1 also includes a waiting process configured to (a) request a second exclusive lock on the object after the holding process has been granted the first exclusive lock on the object, and (b) return a result signal, to a monitor process, upon at least one of

acquiring the second exclusive lock and ceasing to be blocked. The system of Claim 1 also includes the monitor process configured to process the result signal to determine whether the application instance has terminated.

On the other hand, *Huras* is directed towards a method for deadlock detection within a management database system. *Huras* describes a deadlock detector which polls an application control block and makes a determination based on an application flag and a lock wait graph to determine if there is a deadlock. Significantly, *Huras* lacks any teaching or suggestion of determining whether an application instance has terminated.

In view of fundamental differences between Claim 1 and *Huras*, numerous features of Claim 1 are not disclosed, taught, or suggested by *Humas*. For example, Claim 1 recites "a monitoring process configured to process the result signal to determine whether the application instance has terminated." *Huras* does not teach or suggest this element because *Huras* lacks any suggestion of determining whether an application instance has terminated.

Instead of teaching this feature, the portion of *Huras* cited to show this element (Col. 6, lines 42-48) merely states, *in toto*:

> Referring again to FIG. 4, when deadlock detector 46 polls an application control block 38 (step 400) and the application has flag D 38a (step 410), deadlock detector 46 will determine from lock wait graph 50 whether the application 38 holds a lock required by another application, e.g., 36 (step 412). If this condition is found, deadlock detector 46 declares a deadlock (step 414).

Nothing in the above-cited portion suggests detecting whether an application instance has terminated. At best, this portion discusses whether a deadlock has occurred; however, the occurrence of a deadlock is not analogous to the termination of an application instance because an application instance may terminate without the

occurrence of a deadlock. As a result, *Huras* cannot disclose, teach, or suggest this element.

Further, *Agesen* does not teach, and is not cited to teach, the element of "a monitoring process configured to process the result signal to determine whether the application instance has terminated," recited in Claim 1. As a result, even if *Huras* and *Agesen* were to be properly combined, the resulting combination would still fail to disclose, teach, or suggest this element.

Consequently, *Huras* and *Agesen*, either individually or in combination, fail to disclose, teach, or suggest the above-discussed element of Claim1. Therefore, Claim 1 is patentable over both *Huras* and *Agesen* and is in condition for allowance.

Claim 7

Independent Claim 7 recites features similar to those discussed above with respect to Claim 1, except that Independent Claim 7 is recited in method format. Consequently, it is respectfully submitted that Claim 7 is patentable over the cited art, and is in condition for allowance, for at least the reasons given above with respect to Claim 1.

Claims 2-6, 8-13, and 27-31

Claims 2-6, 8-13, and 27-31 are dependent claims, each of which depends (directly or indirectly) on one of the claims discussed above. Each of Claims 2-6, 8-13, and 27-31 is therefore allowable for the reasons given above for the claim on which it depends. In addition, each of Claims 2-6, 8-13, and 27-31 introduces one or more additional limitations that independently render it patentable. However, due to the fundamental differences already identified, to expedite the positive resolution of this case

a separate discussion of those limitations is not included at this time, although the

Applicants reserve the right to further point out the differences between the cited art and

the novel features recited in the dependent claims.

CONCLUSION

For the reasons set forth above, it is respectfully submitted that all of the pending claims are now in condition for allowance. Therefore, the issuance of a formal Notice of Allowance is believed next in order, and that action is most earnestly solicited.

The Examiner is respectfully requested to contact the undersigned by telephone if it is believed that such contact would further the examination of the present application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any fee shortages or credit any overages to Deposit Account No. 50-1302.

Respectfully submitted,

HICKMAN PALERMO TRUONG & BECKER LLP

Christopher J. Brokaw
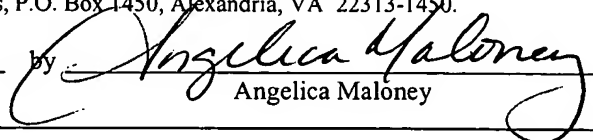Reg. No. 45,620
Date: October 31, 2005

2055 Gateway Place, Suite 550
San Jose, CA 95110
Telephone No.: (408) 414-1080 ext. 225
Facsimile No.: (408) 414-1076